



# UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office  
Address: COMMISSIONER FOR PATENTS  
P.O. Box 1450  
Alexandria, Virginia 22313-1450  
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/798,406	03/12/2004	Minoru Suzuki	016907-1613	5976
22428 7590 02/22/2008 FOLEY AND LARDNER LLP SUITE 500 3000 K STREET NW WASHINGTON, DC 20007			EXAMINER WORKU, NEGUSSIE	
			ART UNIT 2625	PAPER NUMBER
			MAIL DATE 02/22/2008	DELIVERY MODE PAPER

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

## Office Action Summary

Application No.

10/798,406

Applicant(s)

SUZUKI ET AL.

Examiner

Negussie Worku

Art Unit

2625

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 12 March 2004.
- 2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-9 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-9 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 12 March 2004 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO/SB/08)  
Paper No(s)/Mail Date 03/12/04.
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_\_.
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: \_\_\_\_\_.

## DETAILED ACTION

1. This is a replay to the application filed on 03/12/04, in which, claims 1-9 are pending. Claim 1 is independent, and claims 2-9 are dependent.

### ***Information Disclosure Statement***

2. The information disclosure statement (IDS) submitted on 03/12/04, have been reviewed. The submission is in compliance with the provisions of 37 CFR 1.97. Accordingly, the examiner is considering the information disclosure statement.

### ***Claim Rejections - 35 USC § 102***

3. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in a patent granted on an application for patent by another filed in the United States before the invention thereof by the applicant for patent, or on an international application by another who has fulfilled the requirements of paragraphs (1), (2), and (4) of section 371(c) of this title before the invention thereof by the applicant for patent.

4. Claims 1-4 and 6 are rejected under 35 U.S.C. 102(e) as being anticipated by Kato (USP 7,145,681).

With respect to claim 1, Kato '681' shows or discloses an image forming apparatus (as shown in fig 1001 of fig 1) comprising: an interface which receives a job of requesting an accelerator function, from the outside (a multi function device 1001 of fig 1, interface computer server 1001-1007 of fig 1, requesting job function form the outside via LAN network 2011 of fig 1, col.3, lines 55-65+).

a processing path decision section (controller 2150 of fig 2B) which determines whether a first image processing path (2007 of fig 2B) to perform image processing in a copy operation overlaps a second image processing path to perform image processing in the execution of the accelerator function in the job received via the interface (col.2, lines 20-55+); and an image processing section (2114 of fig 2A) which performs image processing in a copy operation (2114 of fig 2A, performs copy operation) and image processing in the execution of the accelerator function at the same time, when the processing path decision section (system controller unit 2150 via system bridge 2007 of fig 2b, determine or as switching means) determines that the first image processing path does not overlap the second image processing path, (col.4, lines 54-65+)

With respect to claim 2, Kato '681' shows or discloses an image forming apparatus (as shown in fig 1001 of fig 1), further comprising: a storage section (database server 1002 of fig 1), which stores a management table to manage waiting jobs unable to execute the accelerator function (*col.4, lines 5-10+*); and

a search section which searches the management table for a job where the first image processing path does not overlap the second image processing path to perform image processing in the execution of the accelerator function in the waiting jobs, (data base server 1002 browses and search image data stored in a data base server 1002 of fig 1, col. 4, lines 5-15) wherein the image processing section executes any job searched for by the search section when the processing path decision section determines that the first image processing path overlaps the second image processing

path (col. 4, lines 5-15).

With respect to claim 3, Kato '681' shows or discloses an image forming apparatus (as shown in fig 1001 of fig 1), wherein the management of the management table includes a parameter used in image processing requested by the accelerator function requested by the waiting jobs (database server 1002 of fig 1, which stores a management table to manage waiting, col.4, lines 5-10+).

With respect to claim 4, Kato '681' shows or discloses an image forming apparatus (as shown in fig 1001 of fig 1), further comprising: a selector section (bus bridge 2007 of fig 2A, function as a first bus switch) which selects a job when a parameter managed in the management table for the job searched for by the search section coincides with a parameter already set in image processing performed in the image processing path of the job, wherein the image processing section, when the job searched for is present, gives priority to the job selected by the selector section, in processing (server 1002 of fig 2A, searches image data stored in the database server 1002, col.4, lines 5-10).

With respect to claim 6, Kato '681' shows or discloses an image forming apparatus (as shown in fig 1001 of fig 1), wherein the image processing section (2149 of fig 4) includes a plurality of image processing blocks each of which subjects image data to different processing, (scanning processing 2114, print processing 2115 of fig

2C) wherein each of the first image processing path and the second image processing path is a path (i.e., memory bus 2107-2109 of fig 2c) which passes through said plurality of image processing blocks in a different manner (image interface 2112, 2113 of fig 2c, considered as different image processing block, col.7, lines 22-40+).

***Claim Rejections - 35 USC § 103***

5. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

6. Claims 5 and 6 are rejected under 35 U.S.C. 103(a) as being unpatentable over Kato (USP 7,145,681), in view of Hashimoto et al. (US 2004/0190044 A1).

With respect to claim 5, Kato '681' does not show or disclose an image forming apparatus, wherein the image processing section includes a color image data processing section which processes color image data and a monochrome image data processing section for processing monochrome image data, and each of the first image processing path and the second image processing path is a path which passes through either the color image data processing section or the monochrome image data processing section.

Hashimoto '044' in the same area of image processing apparatus (as shown in fig 1), teaches wherein the image processing section (fig 1) includes a color image data processing section which processes color image data and a monochrome image data

processing section for processing monochrome image data, (col.4, paragraph 0054-0055+), and each of the first image processing path and the second image processing path is a path which passes through either the color image data processing section or the monochrome image data processing section (col.4, paragraph 0059-0060).

Therefore, It would have been obvious to a person with ordinary skill in the art at the time the invention was made to have modified imaging device of Kato'681' by the teaching of Hashimoto '044', for the purpose to minimize the storage capacity the data to be stored in the file memory, as suggested by Hashimoto '444' in col.1, paragraph 0008-0009, and therefore, it should be clear to one skilled in the art that anyone of a wide variety of image forming apparatus can be similarly employed to accomplish this desired result without depending from the teaching of the present invention,

**7. Claims 7-9 are rejected under 35 U.S.C. 103(a) as being unpatentable over Kito (USP 7,145,681, in view of Hashimoto (USP 2004/0190044) and Ishihara et al. (USP 7, 057,657).**

With respect to claim 7, Kato '681' in combination with Hashimoto '044' still do not teach or disclose an image forming apparatus, further comprising: a system load decision section which determines the magnitude of a system load; an operating clock decision section which determines an operating clock for each processing section included in the image processing section on the basis of the load determined at the load decision section; and a clock setting section which sets a clock operation for each of the

processing sections according to the determination of the operating clock decision section.

Ishihara '657' in the same area of image processing apparatus (as shown in fig 1), teaches an image forming apparatus, (fig 1) further comprising: a system load decision section which determines the magnitude of a system load (signal processing 14d of fig 1); an operating clock decision section which determines an operating clock for each processing section included in the image processing section on the basis of the load determined at the load decision section (system control 12 of fig ); and a clock setting section which sets a clock operation for each of the processing sections according to the determination of the operating clock decision section (timing signal generation 118 of fig 1, col.5, lines 30-40).

Therefore, It would have been obvious to a person with ordinary skill in the art at the time the invention was made to have modified imaging device of Kato'681' as modified by Hashimoto '044', by the teaching of Ishihara '657' for the purpose of to provide a solid-state image pickup apparatus capable of reading only the color and eventually reducing a period of time necessary for signal charges to be transferred in the horizontal direction. as suggested by Ishihara et al.'657' in col.2, lines 1-5, and therefore, it should be clear to one skilled in the art that anyone of a wide variety of image forming apparatus can be similarly employed to accomplish this desired result without depending from the teaching of the present invention.



With respect to claim 8, Kato '681' in combination with Hashimoto '044' still do not teach or disclose shows discloses an image forming apparatus further comprising: a system load decision section which determines the magnitude of a system load; an operating clock decision section which determines operating clocks for at least one of the color image data processing section and the monochrome image data processing section, on the basis of the load determined at the load decision section; and a clock setting section which sets operating clocks in the color image data processing section and the monochrome image data processing section, in accordance with the determination of the operating clock decision section.

Ishihara '657' in the same area of image processing apparatus (as shown in fig 1), teaches an image forming apparatus, (fig 1) further discloses an image forming apparatus further comprising: a system load decision section which determines the magnitude of a system load; an operating clock decision section which determines operating clocks for at least one of the color image data processing section and the monochrome image data processing section, (signal processing 14d of fig 1); on the basis of the load determined at the load decision section; and a clock setting section which sets operating clocks in the color image data processing section and the monochrome image data processing section, in accordance with the determination of the operating clock decision section, (system control 12 of fig 1, timing signal generation 118 of fig 1, col.5, lines 30-40).

Therefore, It would have been obvious to a person with ordinary skill in the art at the time the invention was made to have modified imaging device of Kato'681' as

modified by Hashimoto '044', by the teaching of Ishihara '657' for the purpose of to provide a solid-state image pickup apparatus capable of reading only the color and eventually reducing a period of time necessary for signal charges to be transferred in the horizontal direction. as suggested by Ishihara et al.'657' in col.2, lines 1-5, and therefore, it should be clear to one skilled in the art that anyone of a wide variety of image forming apparatus can be similarly employed to accomplish this desired result without depending from the teaching of the present invention.

With respect to claim 9, Kato '681' in combination with Hashimoto '044' still do not teach or disclose shows an image forming apparatus, further comprising: a system load decision section which determines the magnitude of a system load; an operating clock decision section which determines an operating clock for each processing section included in the image processing section on the basis of the load determined at the load decision section; and a clock setting section which sets a clock operation for each of the processing sections according to the determination of the operating clock decision section.

Ishihara '657' in the same area of image processing apparatus (as shown in fig 1), teaches an image forming apparatus, (fig 1) further comprising: a system load decision section which determines the magnitude of a system load (signal processing 14d of fig 1); an operating clock decision section which determines an operating clock for each processing section included in the image processing section on the basis of the load determined at the load decision section (system control 12 of fig ); and a clock

setting section which sets a clock operation for each of the processing sections according to the determination of the operating clock decision section (timing signal generation 118 of fig 1, col.5, lines 30-40).

Therefore, It would have been obvious to a person with ordinary skill in the art at the time the invention was made to have modified imaging device of Kato'681' as modified by Hashimoto '044', by the teaching of Ishihara '657' for the purpose of to provide a solid-state image pickup apparatus capable of reading only the color and eventually reducing a period of time necessary for signal charges to be transferred in the horizontal direction. as suggested by Ishihara et al.'657' in col.2, lines 1-5, and therefore, it should be clear to one skilled in the art that anyone of a wide variety of image forming apparatus can be similarly employed to accomplish this desired result without depending from the teaching of the present invention.

### ***Conclusion***

8. Any inquiry concerning this communication or earlier communications from the examiner should be directed to NEGUSSIE WORKU whose telephone number is (571)272-7472. The examiner can normally be reached on 9am-6pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Aung Moe can be reached on 571-272-7314. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for

Application/Control Number:  
10/798,406  
Art Unit: 2625

Page 11

published applications may be obtained from either Private PAIR or Public PAIR.

Status information for unpublished applications is available through Private PAIR only.

For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic

Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.



Negussie Worku  
Examiner  
Art Unit 2625